Pathological Internet Use (PIU) in University Students: A new addiction

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ABSTRACT

There is a growing body of evidence suggesting that some university students who have free and readily available access to personal computers, underperform in their first year of study. Their internet use, game playing or chat room activities may result in academic, social and lifestyle problems.

The First World Congress on Internet Addiction which was held in Zurich, Switzerland in September 2000 is thought to have legitimized a new disorder.
This paper will address this comparatively recent phenomenon, computer/cyber addiction that has been observed in all age groups and is directly related to the growth of technology in the late 20th and early 21st Century. There is evidence to believe that this "disorder" may have a small but significant contribution to student attrition rate. The paper will present research that has been carried out on internet use in some western universities, over the past ten years. It will also present case studies from one Australian University.

Every so often, a student will come to the Counselling Service one Queensland university, looking for help with such an obsessive use of their PC for other than university work, that they have stopped attending lectures, cut down on face to face contact with their peers and are failing their subjects. Sometimes the PC has to be moved to the kitchen so that a parent can monitor its use but in many instances there is no one to provide this support. The following two cases illustrate the type of problem described.

Jo, (fictitious name) a 24 year old international student, was referred to the Counselling Service by his faculty because he was not coping with his studies. He was being supported financially, by his parents in an Asian country and was the third child in a family of four children. Jo freely admitted that he did not attend lectures, tutorials or peer assisted study sessions (PASS) groups. He rarely came on campus. Jo had very little social life and did not belong to any "chat " groups on line. He was quite isolated.

Jo said that he could not get motivated by his study and was very bored with it. The only activity that interested him, he said, was computer game playing. Jo reported that he would get excited when he was getting close to solving the problems of the game and working them out. He said that he did not cook meals as he had never done so at home and that most of his meals were from fast food outlets or were delivered. On some occasions he did not leave his home for weeks on end. Jo downloaded and printed off all the subject lecture notes and assignments and usually managed to make sense of them and submit his assignment. He was a very intelligent young man

and had managed to scrape through many of his subjects with the minimum of effort. He was, however, very concerned that he would have to face his father one day and have to explain why he had failed subjects.

David, a 24 year old first year Australian student self referred to the Counselling Service for help in trying to get some motivation and strategies for doing university work.. Dave had previously attended another university and had been excluded a number of times and managed to get back into his course. He had a slight physical disability which meant that university authorities may have been more sympathetic to his case. David explained that he had a very close peer group who chatted to each other on line (MUDs) and played interactive games incessantly. David described how he would sit at his computer for 16 hours until he was so exhausted he would lie on his bed for a few hours before resuming the chat. In leisure time the group would meet at a friend's house and continue the camaraderie. He said that no drugs or alcohol were used. He rarely washed his clothes and apparently had quite a reputation amongst his friends and others for 'BO' and foul smelling apparel (which his friends would waft around outside the window to get some fresh air to them). Because he spent so much time on line, he decided to enrol in a Bachelor of Information Technology when he finally changed university. David was receiving government financial support until the year in which he came to see me. It had been cut off. From that time his mother sent him money every week. She believed that he only had one semester to go before completing his degree and did not know that he had received any exclusions. David felt very bad about this and was not looking forward to having to 'face the music'. Basically David had very little to show for his years at university and had gone through a lot of government and family finances in the process.

The personal computer is an essential tool in the learning process and in the academic success of any university student in the Twenty First Century. Personal computers bring enormous advantages to those who have free and readily available access to them. .In Australia and in North America this statement is undoubtedly true, however in some parts of the world including universities in parts of Europe, ease of access and availability can not be assumed. Some European academics can not conceive of student on –line computer use posing a problem. Their main concern being the disparity between the haves and the have nots in computer access. They perceive the problem being one of discrimination when there are too few computers as occurs in many European universities. One university in southern Spain had only 250 computers for some thousands of students, and students continued to submit hand written assignments (personal communication, Granada, September 2000).

The latest Australian report states that 70% of Australian homes homes own a computer and all universities in 2002 have well equipped, usually 24 hour access computer laboratories. The importance of Information Technology is acknowledged and it has transformed the life and learning of university students.

So, why the concern about personal computer use amongst students? This paper will try to answer that question by discussing some recent studies which suggest that for some university students, their study habits are affected negatively by their dependence on their computer. Some recognize this and try to do something or ask for help. Others remain isolated in their depression , anxiety or despair but still may not realize that their life has changed for the worse because of their intensity and/or duration of PC use.

Anderson (1998) carried out an exploratory study of students at eight New York Universities to find out how much time students spend on the internet and if ' excessive'
Does it result in academic, social orlifestyle difficulties. He examined whether some faculties were more prone to be 'dependent' on the internet than others. The sample included 647 males and 647 females and he found tht the average on-line time ws 100 minutes a day.
The 494 students in the hard sciences spent 123 minutes a day compared with the 289 Liberal Arts students 79 minutes per day.
The internet users were divided into high use group and a low use group . The former (6%) spent more than 4000 minutes per day on the net.
106 or 9-8% fitted the criteria for internet dependence (93 male and 13 female) as defined by the DSM IV criteria for substance dependence. (Table 1)

Table 1 Criteria for Internet Dependence based on DSM IV criteria for substance Dependence.

1. Tolerance
2. Withdrawal
3. Using larger amounts over longer period than was intended
4. The desire or unsuccessful efforts to cut down ort control use.
5. A great deal of time spent in obtaining, using or recovering from it.
6. Social, occupational or recreational activities are reduced.
7. Use continues in spite of negative effects.

The dependents averaged 229 minutes per day of use compared to the non dependents of 73 minutes, the range being from 5 minutes to 1200 minutes per day. The dependent students were significantly more likely to indicate that their online use negatively affected their academic performance, meeting new people and sleep patterns (some reporting having less than four hours sleep in 24).
The computer science major students had 54% of those fitting the criteria for dependency: 74% were in the hard sciences, 165 in the Art aand Sciences and 10% were in the Liberal Arts. This study was conducted in class time. As some extreme users rarely leave their homes and do not attend classes, it was possible that they were not included in the survey. This study supported an earlier study (Shere, 1997) which found that 135 of university students fit the dependence criteria and 72% of the dependent students were male in a total sample of 531 subjects.

Welsh (1999) sampled 810 students in Boston University and found that 8% fitted the criteria for dependence, most of whom were male.

Young (1996) was one of the first researchers to identify what she believed was a new clinical disorder. Again, she used the DSM IV criteria but did not use the one used in previous studies ie for substance dependence. Instead, she used the criteria for pathological gambling as she believed internet addiction was an impulse control disorder. The screening instrument she used consisted of eight questions. If five were answered positively, the subject was classified as dependent. (Table 2)

Table 2. Screening Instrument for Internet Dependence used by Young (1996) based on DSM IV criteria for pathological gambling.

1. Do you feel preoccupied with the internet?
2. Do you feel the need to use the net with increasing amounts of time to achieve satisfaction?
3. Have you repeatedly made unsuccessful efforts to control, cut back or stop net use?
4. Do you feel restless, moody, depressed or irritable when attemping to cut down or stop net use?
5. Do you stay on line longer than intended?
6. Have you jeopardized or risked the loss of a significant relationship job, educational or career opportunity because of the net?
7. Have you lied to family members or others to conceal your involvement with the net?
8. Do you use the net as a wway of escaping from problems or of relieving moods (eg depression, anxiety guilt etc.)

If subjects answer yes to five or more questions, they are classified as dependent (an addicted user).
There are those who dispute such a disorder as internet addiction. Gavagham (1997) wrote in "Going nuts in cyberspace" that she refused to believe that internet addiction is an emerging clinical disorder. She said that she acknowledges that some people spend hours glued to their computer screens and she accepts that some are painfully shy and/or antisocial and "find solace" on the web but that was not a problem.

The first Congress on Internet Addiction was held in Zurich, Switzerland in September 2000. This congress was reported to "legitimize" the new disorder of internet addiction.
Further studies have been undertaken with university students since this congress. Of great significance is the study by Davis (2001) who queried the term "addiction" preferring to substitute the term 'pathological internet use' (PIU). Davis used a cognitive- behavioural model suggesting that in many pathological internet users, there may be an existing psychopathology which predisposed the student, making them vulnerable in the presence of a stressor. Several studies have implicated underlying psychopathology in overuse of the internet, including depression, social anxiety and substance misuse or dependence (Kraut et al., 1998: Greenfield, 2000).

The cognitive-behavioural model of Davis, suggests that psychopathology is a necessary cause of symptoms of PIU. Cognitions or beliefs about self can be self doubt, low self efficacy and negative self appraisal for example "I am only good on the internet and negative world appraisal such as "The internet is the only place that I am respected' or "people treat me badly off- line" A lack of social support and subsequent social isolation can result in PIU. Those with PIU use the PC to postpone or avoid their responsibilities which can result in significant problems with daily functioning. The internet had become the student's lifeline to the outer world. They may not leave their home, some do not attend lectures and tutorials and rarely go on campus. They may neglect their health by eating irregularly and poorly, they may not exercise and may sit in one position for hours. They lose a diurnal body clock, sleeping when they are too exhausted to continue. Tindle (1999, 2000 and 2001) examined the physical, social and psychological impact on university students of the overuse of the personal computer.

Orman (1996) argued that many students who have allowed their personal computer to have a detrimental affect on their lives begin, as in all addictions, by denying that there is a problem and fail to ask for help. They may lack pleasure in their lives and struggle to cope with managing even the most basic aspects of their daily functioning. They are unable to organize their time to complete assignments whilst at the same time continuing to spend many hours in front of their screen. They may fail to turn up for university events such as examinations and their academic performance slips. They are in danger of failing their subjects or dropping out of university.

Dr. Yoni Ryan has said (Background Briefing, Radio National, 2001) that education is a social activity and the majority of university students want to talk with real people. She went on to say that university education is an interpersonal affair and the relationship between people is critical to learning and the educational process. The students described in this paper play a minimum role in university social behaviour and may not establish face to face relationships on campus. They do not become integrated into the university community.

Student who may be in trouble need to be identified and helped.Tutors may have to keep rolls of attendance and contact those students who consistently miss lectures or tutorials. Referral to specialist faculty staff or student services may help those who have lost their way. Counselling Services can provide professional assistance to those who wish to avail themselves of it. It is a free and confidential service located on each campus

This paper has given a brief overview of a comparatively recent problem emerging on many campuses in North America and Australia as a result of the exponential growth in information technology. Although the percentage of students fitting the criteria for PIU is small, that is between 8% and 13%, these numbers can make a significant contribution to the high attrition rate seen in many Australian Universities.

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